DISCUSSION

Claim 1 has been amended to remove the terms objected to by the Examiner and to provide top edges in a proper form. Applicants submit that the amendments to claim 1 overcomes the rejection under 35 U.S.C. 112. Claim 12 has been amended to indicate that the hardness has antecedent basis in claim 1. None of the amendments to the claims were entered to overcome any prior art references of which applicants are aware.

New claims 13-19 have been entered to claim preferred embodiments of the invention. The amendments to the claims and the new claims are fully supported in the specification and claims as originally filed. Support for new claims 13-15 appears at page 6, lines 9-17. New claims 16 and 17 are supported at page 12, lines 19-23. New claims 1 and 19 are supported at page 9, lines 10-14. No new matter has been entered by way of amendment to the claims.

Before discussing the rejections over the prior art, applicants deem it prudent to set forth what they consider to be their invention.

The invention in the broadest sense is a liner structure. The liner structure is flexible, non-curling and non-skid. The liner structure comprises a thin flexible sheet of a first polymeric resin having non-skid properties and is non-curling. The bottom of the flexible sheet contacts a supporting substrate and the non-skid properties permits the flexible sheet to remain in place without use of adhesives or other means such as nails, screws or spikes.

The flexible sheet has a top surface which has upwardly extending ridges comprising a second polymeric resin which is harder than the first polymeric resin. The ridges of the harder second polymer provide a coefficient of friction to the tops of the ridges which is lower than the coefficient of friction of the first polymeric resin which forms the non-skid bottom surface. The upwardly extending ridges are spaced apart and extend upwardly from the top surface of the flexible sheet of the first polymeric resin.

The upwardly extending ridges can be formed from the harder resin or only

capped.

The liner structure of the invention lays flat on a horizontal surface and due to the non-skid properties of the bottom surface remains in place without adhesives, nails, screws, two sided tape or spikes.

The dependent claims are directed to preferred features of the liner structure such as the shape of ridges, thickness, composition, spacing of ridges, hardness of polymeric resins and the like.

Claims 1-17, 11 and 12 stand rejected under 35 U.S.C. 103(a) over U.S. 5,204,159 (Tan '159) in view of U.S. 4,9067,057 (Bayless et al. '057). Applicants respectfully submit that Tan '159 and Bayless et al. '057 whether considered alone or in combination neither teach nor suggest the present invention.

The Examiner states:

> "Tan '159 disclose a liner structure comprising a defomable, i.e., which is considered to be flexible sheet (10-see Fig. 1) having a top and bottom surface; the sheet (10) comprised of a first polymeric resin (see column 2, lines 65-69) base (12a) which is considered to render the sheet non-curling (see Fig. 4) and the bottom surface non-skid (see column 2, line 31-33) and a plurability of downward extending ridges (at 14) extend from the bottom surface (12a) and comprise the first polymeric resin; a plurality of upwardly extending ridges (20) on the top surfaces of the sheet (18) whereby the top surface (18) is comprised of a second polymeric resin and the second resin is different from the first resin (see column 2, lines 58-62); with respect to claim 2, the bottom surface (12 12a) of the sheet (10) is substantially flat (at portions in between 14); and with respect to claim 3, the bottom surface is considered to be undulating, i.e., at 16, the bottom surface is wavelike."

Examiner's characterization of the structure of Tan '159 is incorrect and in fact with respect to claims 2 and 3 clearly shows the patentability of the liner structure of the present invention.

Firstly, applicants can find no reference to Tan '159 that the pad <u>is flexible</u>. Tan '159 characterizes the mat as being "deformable". "Deformability defines a property different from flexibility. The dictionary definition of deform is as follows: 3. <u>Physics</u> to alter the shape by pressure or stress (THE AMERICAN HERITAGE DICTIONARY OF

THE ENGLISH LANGUAGE Haughton Mifflin Co., 1981). In relation to the Tan '159 mat, deformable means that when pressure is applied to the pad by a person walking on the pad, the pad can deform to permit the spikes on the lower surface to be forced out of the recessed areas to penetrate the ice on which the pad is laid. There is no teaching that the pad is flexible. The Tan "159 pad is also described as resilient which means that when the pressure is removed, the pad returns to the original configuration.

Applicants respectfully submit that an article which is deformable and resilient is not of necessity flexible.

In addition, applicants have thoroughly perused Tan '159 and can find no reference to ridges. A ridge is generally a long narrow upper section or crest of something or a horizontal line formed by the junction of two sloping planes. A ridge has a factor of some substantial length. The spikes in the bottom surface of the Tan '159 mat are not ridges since they terminate in a point and have no substantial length in a horizontal plane.

The abrasive particle which extend from the top surface of the Tan '159 pad do not provide ridges and are not taught as such in the reference. The hard particles are embedded in the top layer of the Tan '159 pad to provide a non-slip top surface. That is, a surface with a higher coefficient of friction than the polymer from which the surface is formed. However, Tan '159 teaches that the top surface of the pad can be an anti-slip polymer surface (column 2, lines jk50-53).

Applicants submit that the Tan '159 structure requires a top surface with a high coefficient of friction of friction to prevent slipping and provide an anti-slip top surface. This is opposite to the edges of the ridges which requires a lower coefficient of friction than the web to permit items resting on the ridges to be moved more easily. This is a requirement in contrary to he required properties of the Tan '159 mat.

The spike in the bottom surface of the Tan '159 mat are not ridges and are not disclosed as such. The spike end is a point and not a ridge. The material from which the bottom surface of the Tan '159 mat is formed does not provide the non-slip properties to the bottom surface. The non-slip properties are provided by the structure

which provide spikes which penetrate into the ice when pressure is applied to the top surface and the mat deformed. As disclosed, the Tan '159 mat has a construction which provides for non-slip properties to both the top and bottom surfaces of the mat. In contrast to the structure of Tan '159, the liner structures of the present invention require a polymer which provides a non-slip bottom surface and a top surface with a lower coefficient of friction than the bottom surface (more slippery) to provide for easy movement of objects resting on the top surface. One skilled in the art would recognize that the Tan '159 mat would require as high a coefficient of friction on the top surface as would be reasonably possible to obtain and would not be led to providing a top surface with a low coefficient of friction.

There is no teaching or suggestion to make the bottom surface non-skid by use of a polymer with a high coefficient of friction, instead, Tan '159 requires the spikes which penetrate ice be incorporated into the bottom surface. The spikes and the lower surface of the mat (same material) are made from a hard polymer so that the spikes have sufficient strength to penetrate ice. The hard spikes cannot be incorporated in the bottom surface of the liner structure of the present invention since the hard spikes would mar the surface on which the liner was laid and there is not sufficient pressure to cause the spikes to penetrate the shelf or drawer surface which can be made of wood or metal.

The Examiner states that a portion of the bottom surface (between the openings and spikes) is substantially flat. However, this does not mean that the entire surface is flat. In addition, the Examiner also characterizes the same bottom surface of the Tan '159 structure as undulating. Applicants submit that the same surface cannot be both substantially flat and also undulating.

Applicants respectfully submit that Tan '159 neither teaches nor suggests the present invention.

The deficiencies in Tan '159 are not cured by combination with Bayless et al. '057. Bayless '057 is directed to an electrically heated, snow melting, mat about 13 to about 18 mm thick. The top and bottom surfaces of the mat are covered with

protuberances (Col. 3, line 50 – Col. 4, line 4). The protuberances are not ridges as required in the liner structure of the present invention. Protuberances are critical to the Bayless et al. '057 structure to permit water to drain from the mat in any direction to prevent a buildup of snow, ice or water (col. 3, lines 56-62). The Bayless '057 structure could not have ridges as disclosed in the present application since the ridges would prevent the water from running off the surface in any direction. Since neither the Tan '159 structure nor the Bayless et al. '057 structure have ridges of the form as taught in the present application, or ridges which are more slippery than the bottom surface (lower coefficient of friction), the alignment of the ridges could not be taught or suggested by Tan '159 in view of Bayless et al. '057.

Applicants do not understand the Examiner's position that the spikes of Tan '159 and the protuberances of Bayless et al. '057 are ridges. The spikes, particles and protuberances are not described as ridges. Since they do not have any substantial length, in mountaineering terms they would be classified as peaks. Applicants submit that the Examiner's analysis of Tan '159 and Bayless et al. '057 is untenable and completely distorts the meaning of the term ridge as defined in the Dictionary and as taught in the present application.

Applicants respectfully request that the rejection be reconsidered and withdrawn.

The Examiner states:

> "With respect to (b) although Tan '159 does not explicitly state that the second resin is harder than the first resin, it would have been an obvious design choice to one of ordinary skill in the art at the time the invention was made to have fabricated the top surface of Tan '159 with upwardly extending ridges, as taught by Bayless et al. '057, and to have made the second resin harder than the first resin, thereby inhibiting curling of the structure."

Applicants submit that increasing the hardness of the resin does not inhibit curling but can increase curling. This is set forth at page 2, lines 2-10 of the present application. Increasing the softness of the resin makes the structure non-curling (page 2, lines 12-16).

Applicants respectfully submits that there is no teaching in Tan '159 and Bayless

et al. '057 to make the top surface of the mat more slippery by increasing the hardness of the resin. The top surface of both structures have as high a coefficient of friction as possible to prevent slipping. Applicants request that the Examiner reconsider the teachings of Tan '154 and Bayless et al. '057.

The deficiencies in the combination of Tan '159 and Bayless et al. '057 are not cured by combination with U. S. 4,336,293 (Eden '293). Eden '293 discloses that the base mat can be made from plasticized polyvinyl chloride. However, since the combination of references neither teaches nor suggests the structure of the liner of the present invention, applicants submit that claims 8, 9 and 10 are not obvious over the combination of Tan '159. Bayless et al. '057 and Eden '293 whether considered alone or in combination.

Applicants respectfully submit that there is neither teaching or suggestion in the references cited of a liner having ridges on the top surface comprising a resin harder than the resin forming the web to provide the edges of the ridges with a coefficient of friction lower than the coefficient of friction of the bottom side of the structure. Applicants submit that all of the references cited require that the coefficient of friction of the top surface be the same or higher than the bottom of the mat. In addition, where ridges are shown Eden '293, the ridges have top surfaces with a high coefficient of friction to prevent slipping.

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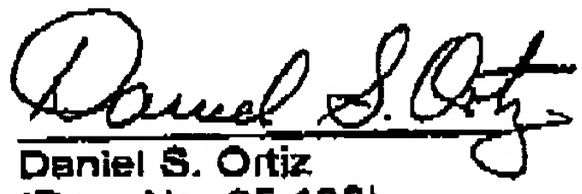
In view of the amendments to the claims and the above discussion, Applicants submit that the application is in condition for allowance and favorable consideration is requested.

Respectfully submitted,



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